Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(Currently amended)** A method for altering a T cell mediated pathology in a patient, said method comprising:

administering a composition comprising a first and a second chimeric protein;

said first chimeric protein comprising at least a portion of a V_β or V_α region of a TCR, at least a portion of a heavy chain immunoglobulin constant region;

and a linker region between said V_β or V_α region and said portion of a heavy chain immunoglobulin constant region; wherein said linker region is either (a) a portion of the C_β or C_α region of a TCR wherein said C_β or C_α region is any integer number of amino acids from 1 to about 30, inclusive ~~thirty amino acids or less~~, or (b) a synthetic linker region; and

said second chimeric protein comprising at least a portion of the other of said V_β or V_α region of a TCR wherein said V_α region or said V_β region in said second chimeric protein is not present in said first chimeric protein,

at least a portion of a light chain ~~an~~ immunoglobulin constant region; and

a linker region between said V_β or V_α region and said portion of a light chain immunoglobulin constant region; wherein said linker region is either (a) a portion of the C_β or C_α region wherein said C_β or C_α region is any integer number of amino acids from 1 to about 30, inclusive ~~thirty amino acids or less~~, or (b) a synthetic linker region;

wherein said V_β and said V_α region are associated with a particular TCR from a T cell from said patient having said T cell mediated pathology;

wherein said chimeric proteins are produced in insect cells by a baculovirus expression system and said administering of said composition alters said T cell mediated pathology in said patient.

2. **(Canceled)**

3. **(Previously presented)** The method of claim 1 wherein said heavy chain immunoglobulin constant region comprises a human $IgG_{\gamma 1}$ constant region.

4-7. **(Canceled)**

8. **(Previously presented)** The method of claim 1 wherein said V_α or V_β region of a TCR of said first chimeric protein is a V_β region and said V_α or V_β region of a TCR of said second chimeric protein is a V_α region.

9. **(Previously presented)** The method of claim 1 wherein said light chain immunoglobulin constant region comprises a portion of a human κ or λ constant region.

10. **(Previously presented)** The method of claim 1 wherein said V_β region of a TCR is an entire V_β region.

11. **(Previously presented)** The method of claim 6 wherein said V_β region comprises an entire V_β region and said portion of a C_β comprises the first nine amino acids from a TCR β chain constant region (C_β).

12. **(Previously presented)** The method of claim 1 wherein said V_α region of a TCR is an entire V_α region.

13. **(Previously presented)** The method of claim 7 wherein said V_α region comprises an entire V_α region and said linker region comprises the first nine amino acids from a TCR α chain constant region (C_α).

14. **(Previously presented)** The method of claim 1 wherein said heavy immunoglobulin constant region is selected from the group consisting of a human $IgG_{\gamma 1}$ constant region, a human $IgG_{\gamma 2}$ constant region, a human $IgG_{\gamma 3}$ constant region, a human $IgG_{\gamma 4}$ constant region, a human IgA_1 constant region, a human IgA_2 constant region, a human IgM constant region, a human IgD constant region, and a human IgE constant region.

15. **(Previously presented)** The method of claim 1 wherein said chimeric protein is produced by a method comprising:

isolating genes encoding said V_β or V_α regions of a TCR from T cells of said patient having said T cell mediated pathology;

inserting one of said genes encoding either of said V_β or V_α region of the TCR, a linker region, and a gene encoding said heavy chain immunoglobulin constant region into an expression vector to allow the expression of said first chimeric protein;

inserting said gene encoding the other of V_β or V_α region of the TCR, a linker region, and a

gene encoding at least a portion of a light chain immunoglobulin constant region into said expression vector to allow the expression of said first chimeric protein; and

producing said chimeric proteins by introducing said expression vector into insect cell lines; and isolating said chimeric proteins.

16-17. **(Canceled)**

18. **(Withdrawn)** The method of claim 15 or 16 further comprising a step of conjugating said chimeric proteins to a carrier protein.

19. **(Withdrawn)** The method of claim 18 wherein said carrier protein is keyhole-limpet hemocyanin (KLH).

20. **(Original)** The method of claim 1 wherein said composition is further co-administered with a cytokine or chemokine.

21. **(Original)** The method of claim 20 wherein said cytokine is granulocyte-macrophage-colony stimulating factor (GM-CSF).

22. **(Withdrawn)** The method of claim 20 wherein said chemokine is a monocyte chemotactic protein 3 (MCR 3).

23. **(Original)** The method of claim 15 wherein said expression vector is a baculovirus expression vector.

24. **(Original)** The method of claim 23 wherein said baculovirus expression vector comprises a honey bee melittin secretory signal sequence and a human placental alkaline phosphatase secretory signal sequence.

25. **(Currently amended)** The method of claim 24 wherein said baculovirus expression vector further comprises a baculovirus AcNPV p10 ~~promotor~~ promoter and AcNPV polyhedrin ~~promotor~~promoter, said p10 ~~promotor~~ promoter controls a honey bee melittin signal sequence, and said polyhedrin ~~promotor~~ promoter controls a human placental alkaline phosphatase signal sequence.

26. **(Currently amended)** The method of claim 25 wherein said gene encoding said V_β region of the TCR and said gene encoding said first heavy chain immunoglobulin constant region are controlled by said p10 ~~promotor~~ promoter in said baculovirus expression vector, said gene encoding said V_α region of the TCR and said gene encoding said second light chain immunoglobulin constant region are controlled by a polyhedrin ~~promotor~~ promoter in said baculovirus expression vector.

27. **(Currently amended)** The method of claim 25 wherein said genes encoding said V_β or V_α region of the TCR, and said genes encoding said immunoglobulin constant region are controlled by either said p10 ~~promotor~~ promoter or said polyhedrin ~~promotor~~ promoter in said baculovirus expression vector.

28. **(Previously presented)** The method of claim 15 wherein said genes encoding said heavy chain immunoglobulin constant region comprises a human $IgG_{\gamma 1}$ gene.

29. **(Previously presented)** The method of claim 15 wherein said light chain immunoglobulin constant region comprises a human κ or λ constant region gene.

30. **(Previously presented)** The method of claim 15 or 16 wherein said gene encoding said heavy chain immunoglobulin constant region is selected from the group consisting of a human $IgG_{\gamma 1}$ constant region, a human $IgG_{\gamma 2}$ constant region, a human $IgG_{\gamma 3}$ constant region, a human $IgG_{\gamma 4}$ constant region, a human IgA_1 constant region, a human IgA_2 constant region, a human IgM constant region, a human IgD constant region, and a human IgE constant region.

31. **(Original)** The method of claim 15 wherein said first chimeric protein is TCR V_β-C_β-$IgG_{\gamma 1}$, TCR V_α-C_α-κ or TCR V_α-λ.

32. **(Original)** The method of claim 16 wherein said first and second chimeric proteins are TCR V_β-C_β-$IgG_{\gamma 1}$ and TCR V_α-C_α-κ or TCR V_β-C_β-$IgG_{\gamma 1}$ and TCR V_α-C_α-λ.

33. **(Currently amended)** The method of claim 15 wherein said insect cell lines are *Trichoplusia ni* (Hi - 5) or *Spodoptera frugiperda* (sf9) cell lines.

34. **(Previously presented)** The method of claim 15 wherein said chimeric proteins are analyzed for expression by ELISA.

35. **(Previously presented)** The method of claim 15 wherein said chimeric proteins are isolated using a protein selected from the group consisting of protein A, protein G, protein L and other proteins being able to bind to an immunoglobulin binding domain.

36. **(Original)** The method of claim 35 wherein said other protein able to bind an immunoglobulin binding domain is an anti-immunoglobulin antibody.

37. **(Original)** The method of claim 1 wherein said T cell mediated pathology is T cell lymphoma.

38. **(Withdrawn)** The method of claim 1 wherein said T cell mediated pathology is an autoimmune disease selected from the group consisting of multiple sclerosis, systemic lupus

erythematosus, diabetes, inflammatory bowel disease, myasthenia gravis, rheumatoid arthritis, and thyroiditis.

39 – 56. **(Canceled)**